

# Future Protected Bike Lane Network for Honolulu

Department of Transportation Services  
City & County of Honolulu

Public Meeting – Neal Blaisdell Center  
September 1, 2015



# King Street Protected Bike Lane

- Opened December 2014
- Opened as one-way in the Diamond Head direction
- 2 year pilot project



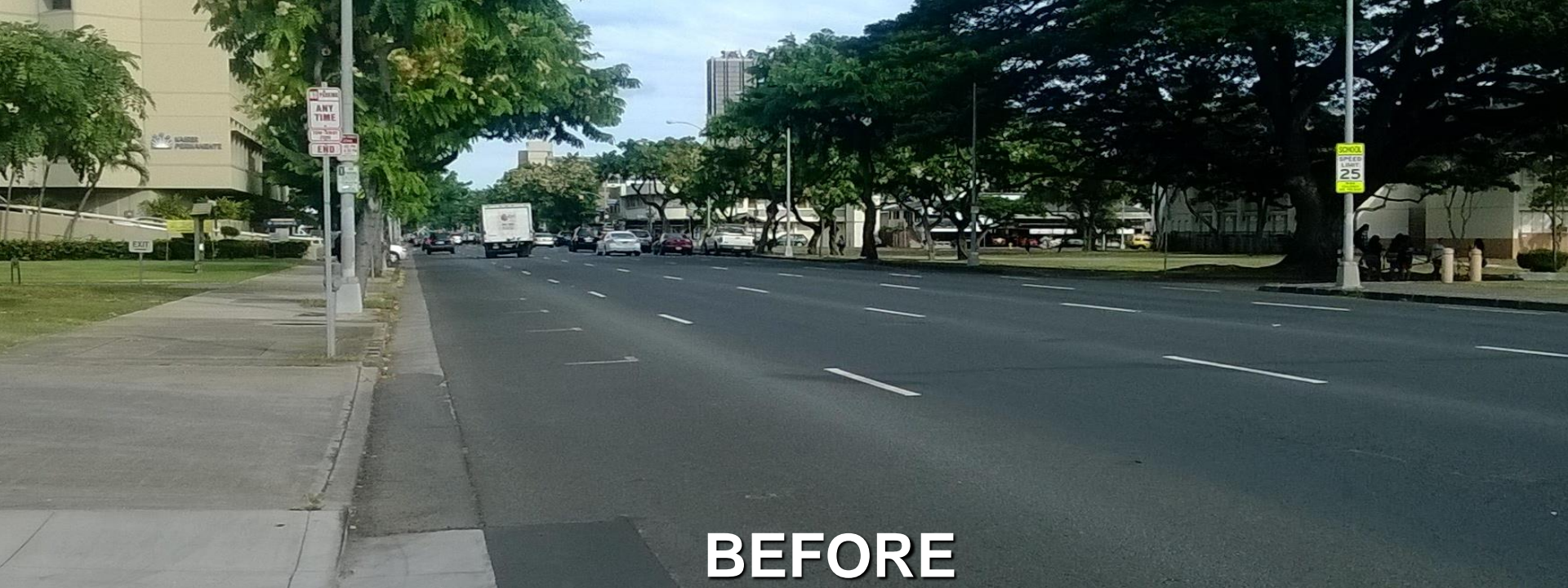


# Changes Since the Opening

- Converted to two-way in May 2015
- Installed bike signals for Ewa-bound bicyclists
- Installed “Look Both Ways For Bikes” signs at driveways
- Removed 11 parking stalls near driveways to increase visibility for both motorists and bicyclists
- Added AM peak parking restriction between Kealamakai St and Ward Ave to help ease morning congestion







BEFORE

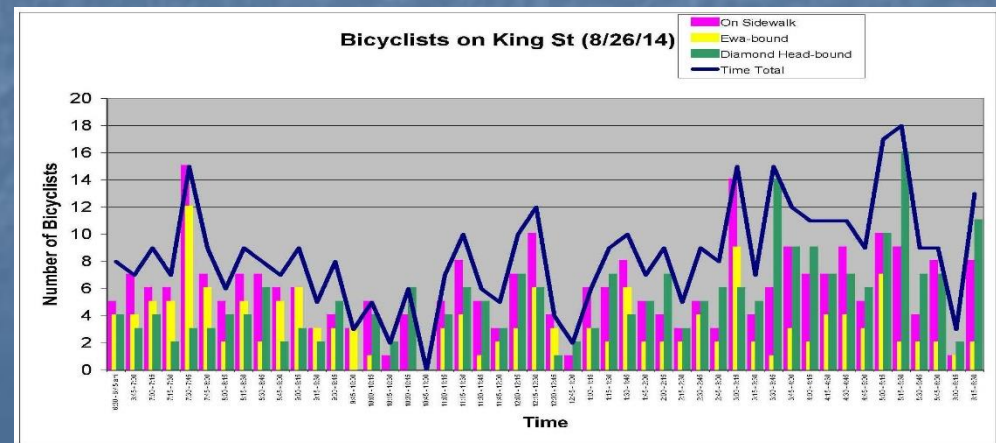
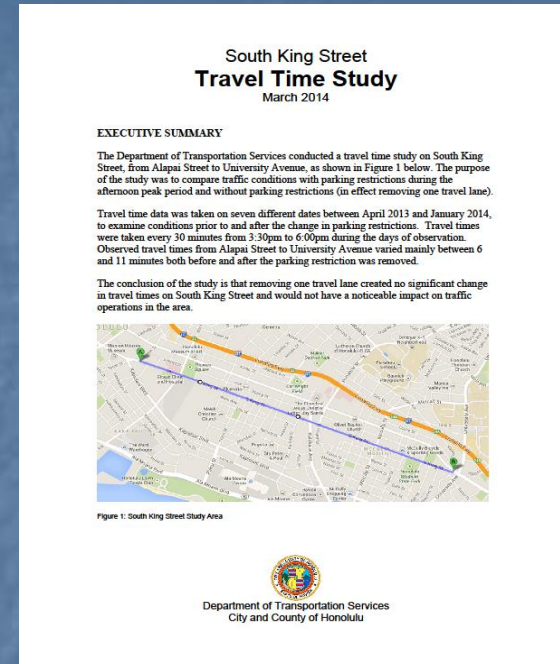


AFTER



# Studies and Data Gathering

- Gathering data throughout pilot period
- Before and After Bicycle Counts
- Before and After Motor Vehicle Travel Times
- Before and after Traffic Volume Counts



# Manual Bicycle Counts

- Count bicyclists in the public right-of-way (including sidewalks)
- Direction: Ewa or Diamond Head
- Facility: Sidewalk, Travel Lane, or Bike Lane
- 12 hours (6:30 a.m. to 6:30 p.m.) in 15 minute increments
- Other users of the bike lane



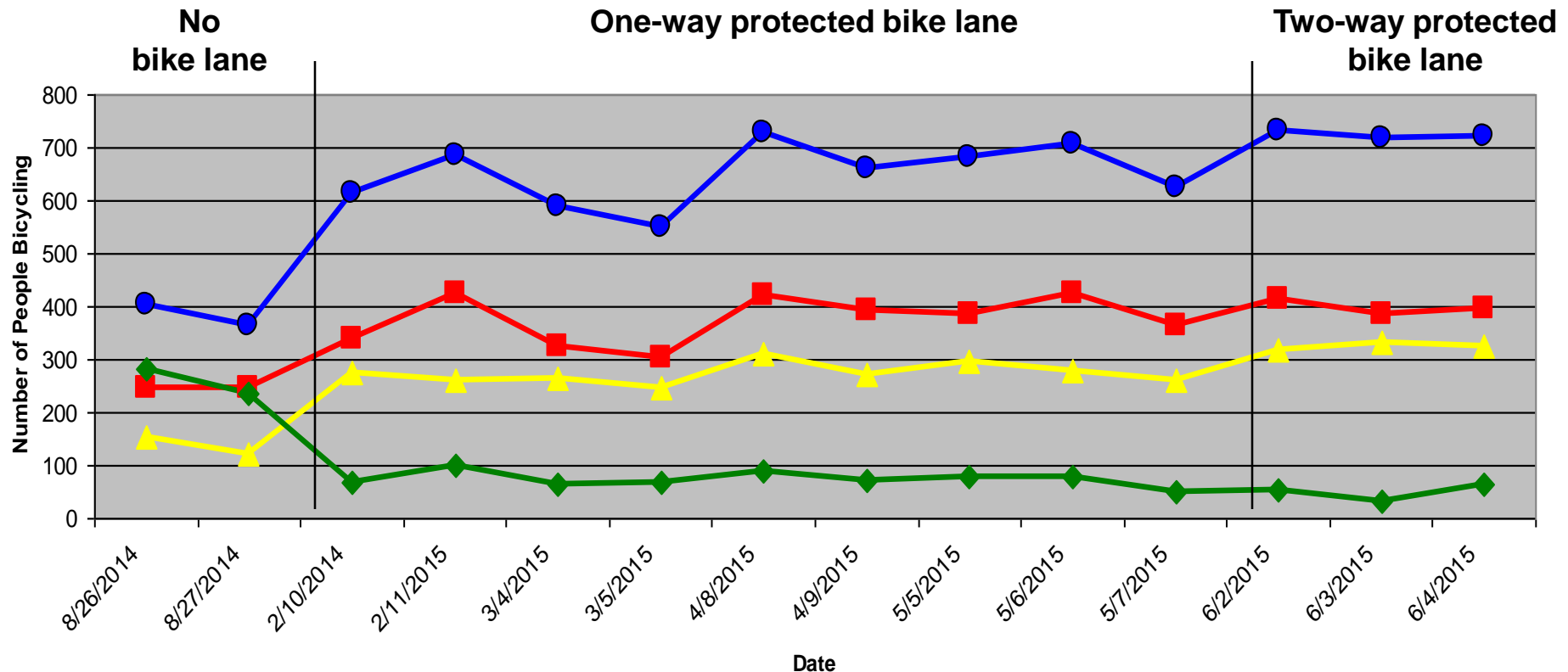
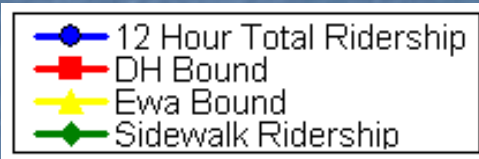
Traffic Camera



On-site

# Results for South King Street at Kalākaua Avenue

**88%**  
Increase in  
bicycle ridership

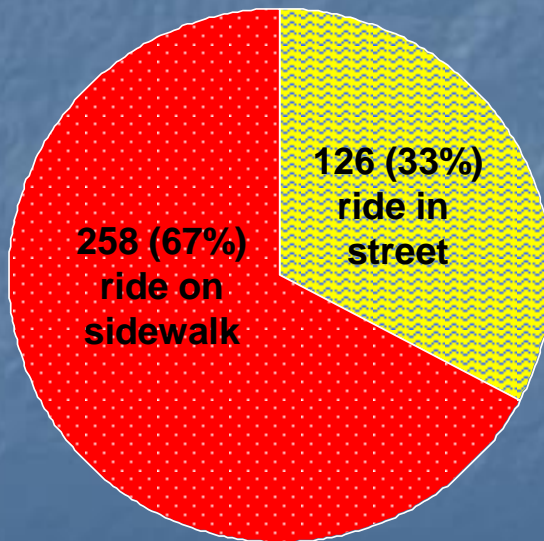




# Where are people riding?

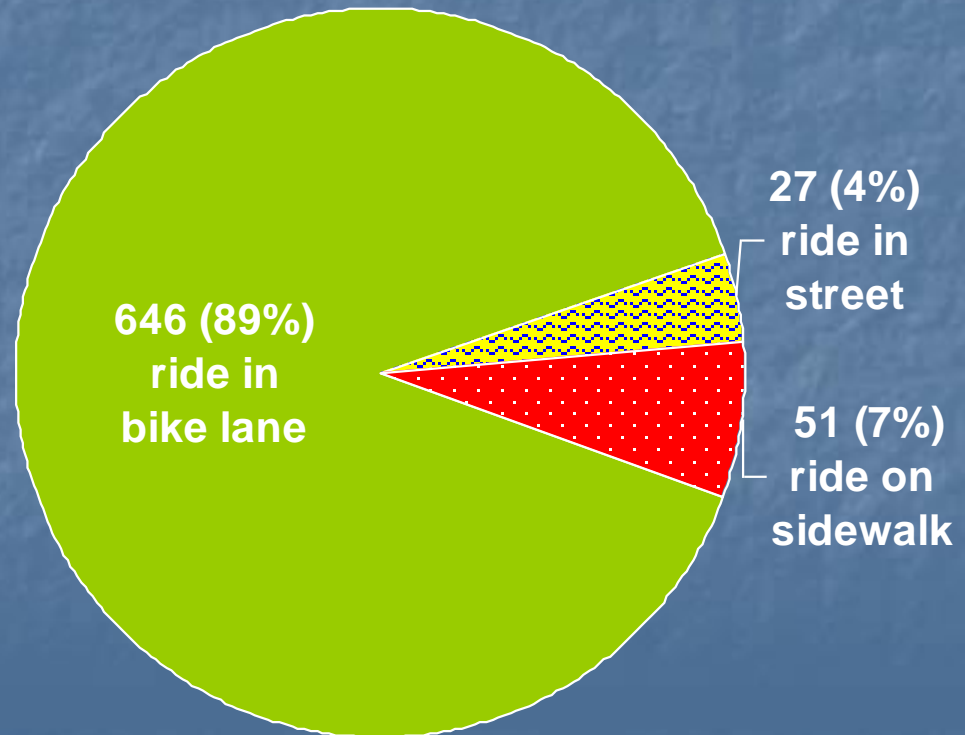
## Before

No bike lane  
384 bicyclists / 12 hours



## After

Two-way protected bike lane  
724 bicyclists / 12 hours





# Screen line counts

## 7 Locations



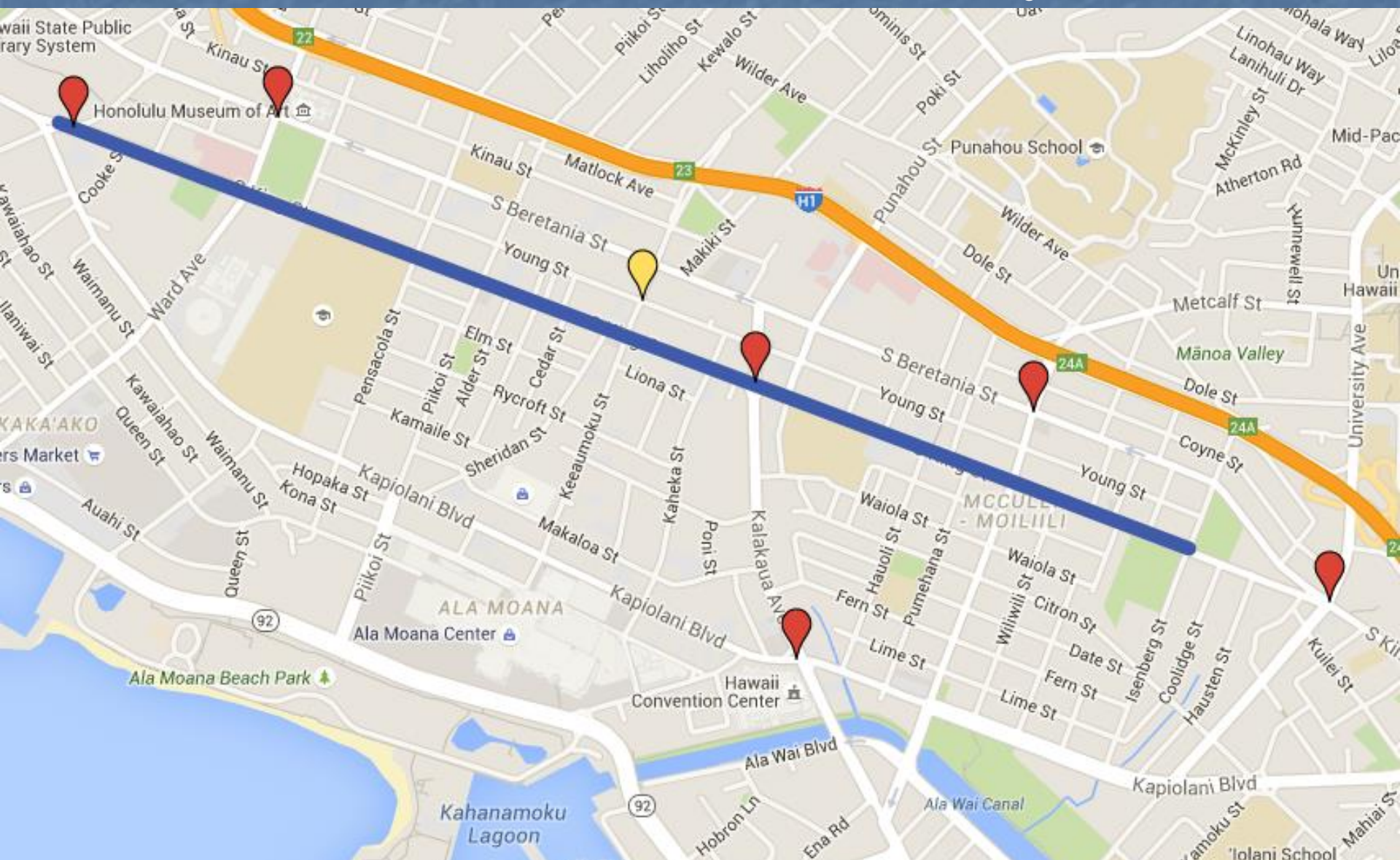
Traffic Camera



On-site



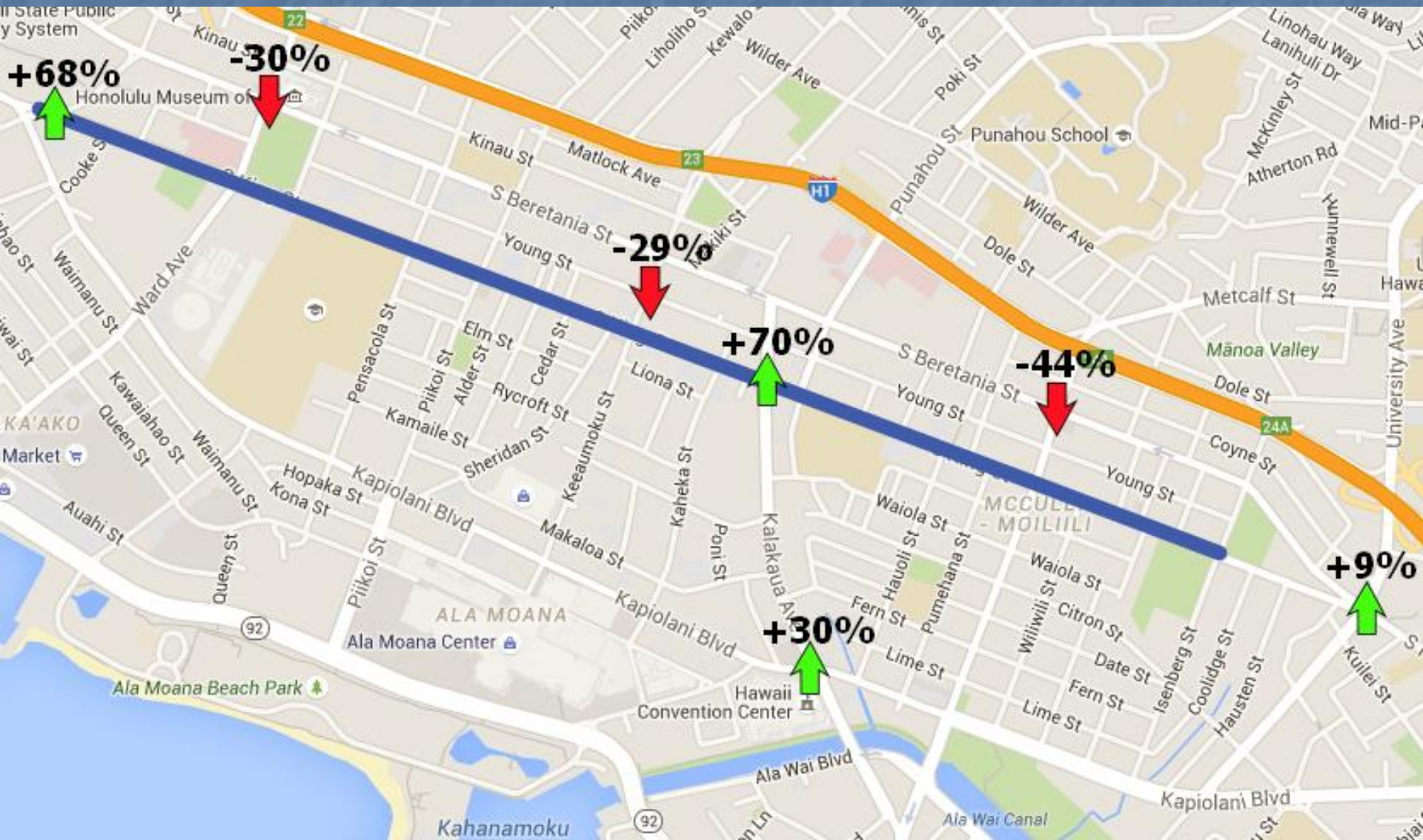
King Street Protected Bike Lane





# Screen Line Results

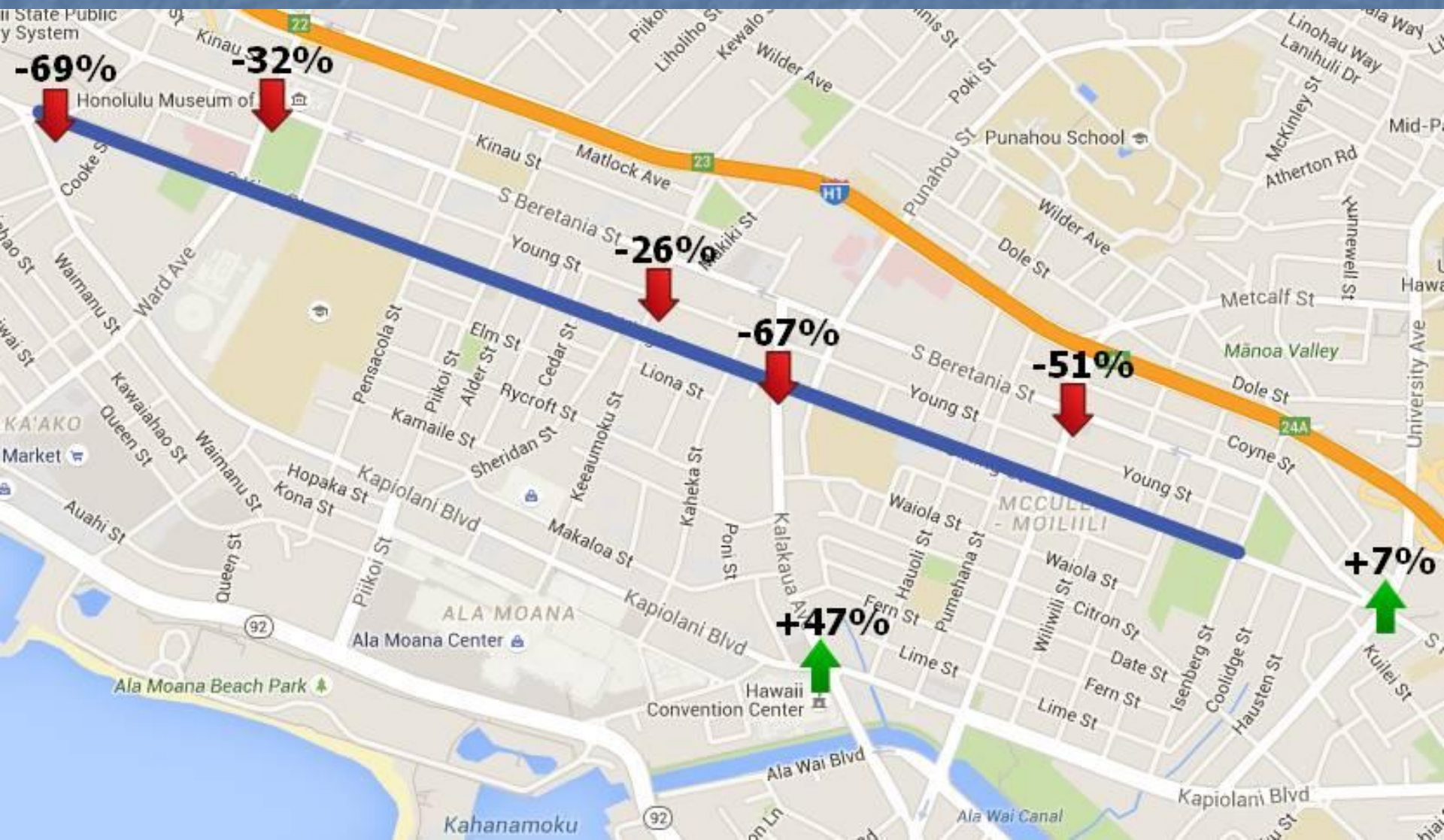
Comparing August 2014 (before) to February 2015 (after)





# Screen Line Sidewalk Ridership

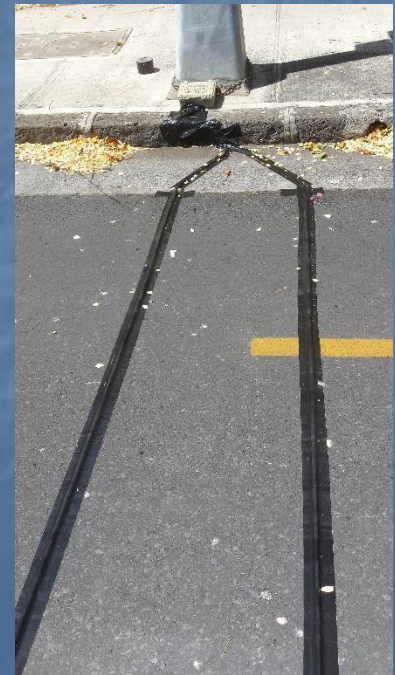
Comparing August 2014 (before) to February 2015 (after)



# Automatic Bicycle Counts

## Tube Counters

- Count bicyclists riding in the bike lane on King Street
- Direction: 'Ewa bound or Diamond Head bound
- 12 hour (6:30 a.m. to 6:30 p.m.)
- 24 hour (6:30 a.m. to 6:30 a.m.)
- 15 minute increments
- Bicycle speeds

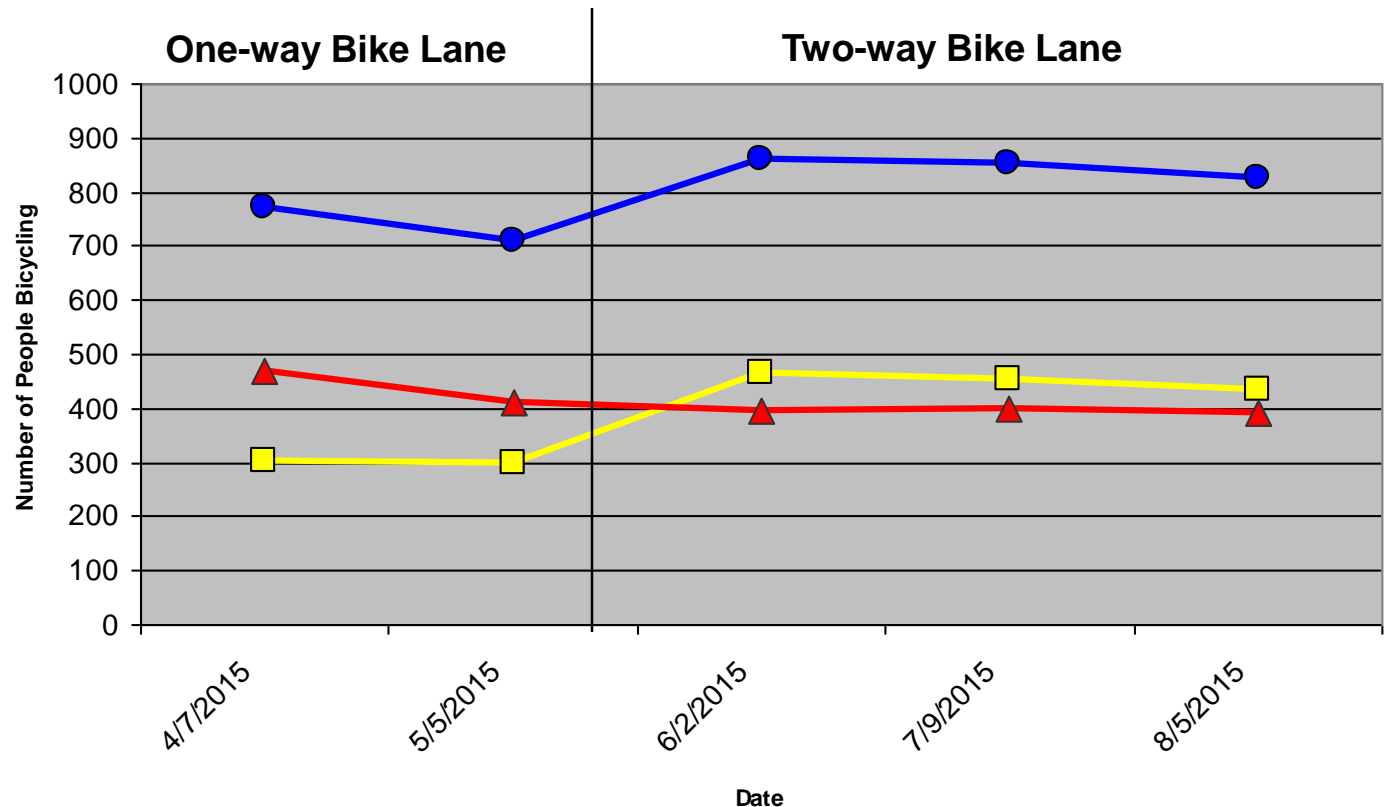




# Automatic Count Results

## 24 hour counts in the bike lane

Date	Bike Lane	24 Hour Total Ridership	Ewa Bound	DH Bound
4/7/2015	One-way	772	302	470
5/5/2015	One-way	711	300	411
6/2/2015	Two-way	859	465	394
7/9/2015	Two-way	852	454	398
8/5/2015	Two-way	826	435	391



■ Ewa Bound  
▲ DH Bound  
● 24 Hour Total Ridership

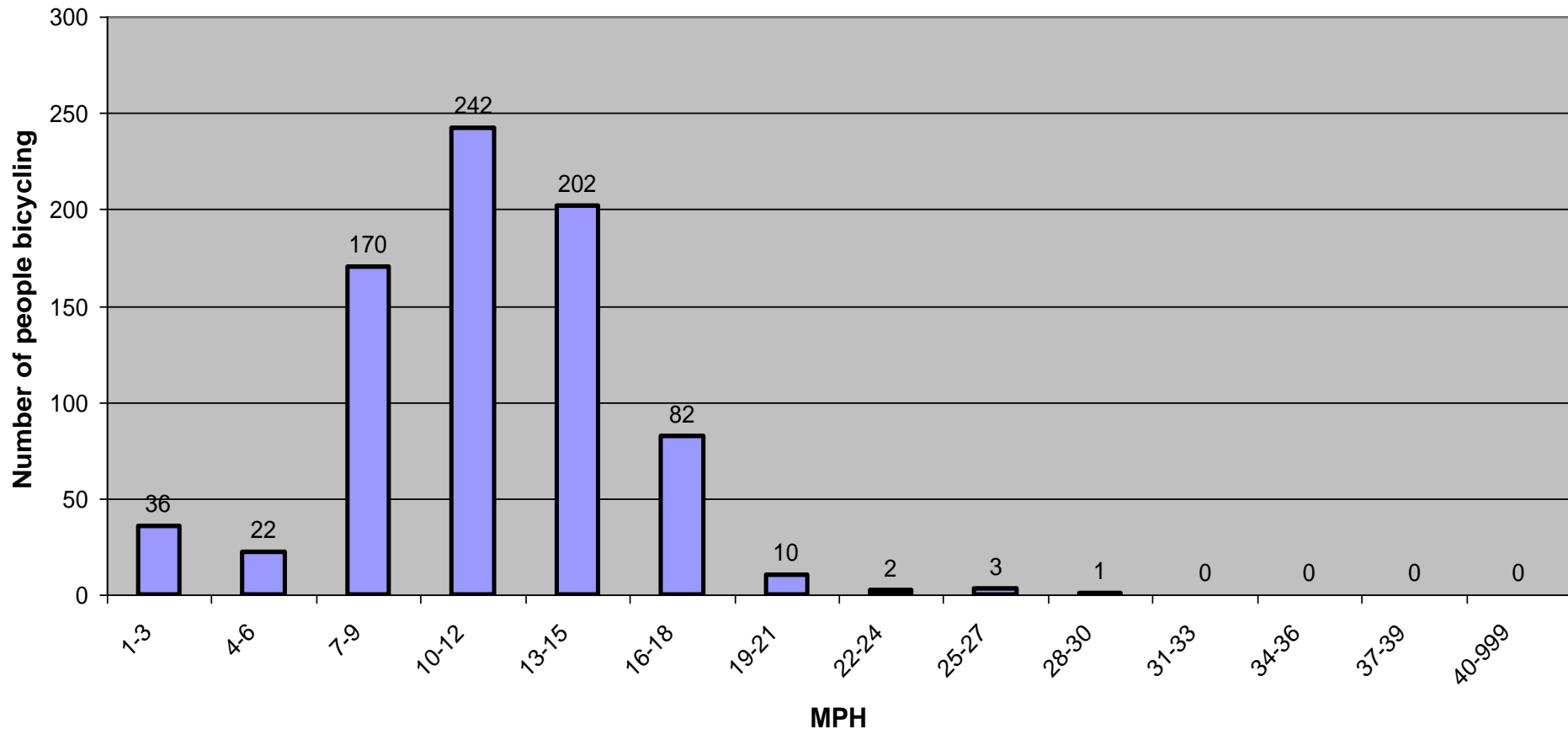
# Bicycle Speed Results

Average Speed: 12 MPH

85<sup>th</sup> Percentile: 15 MPH

Speed Distribution

for April 7, 2015





# Vehicle Travel Time Study

- South King Street from South Street to University Avenue.
- Results are an average of travel time runs done over multiple days.
- BEFORE construction runs were conducted in April 2013.
- AFTER construction runs were conducted in Jan, Feb, & Apr 2015.

Time	Before (min:sec)	After (min:sec)	Time Difference (min:sec)
3:30 PM	6:16	7:25	+ 1:09
4:00 PM	6:15	6:53	+ 0:38
4:30 PM	7:28	7:56	+ 0:28
5:00 PM	9:41	10:19	+ 0:38
5:30 PM	10:06	9:48	- 0:18
6:00 PM	7:03	7:27	+ 0:24
<b>AVERAGE</b>	7:48	8:18	+ 0:30

# Future Projects



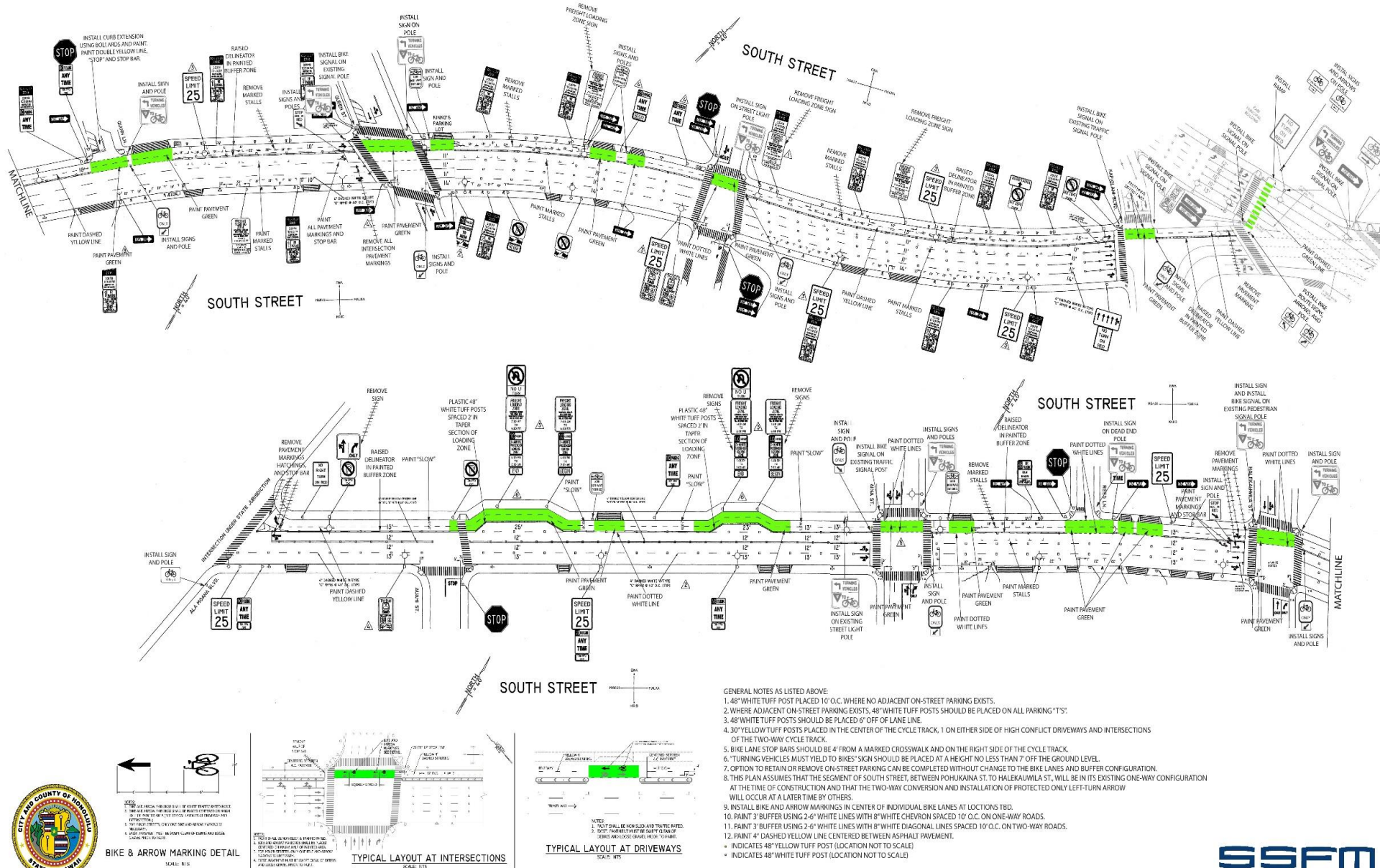


# Mauka/Makai Routes

- Focus is to connect to the King Street protected bike lane to create a network
- Many routes will also connect to future rail stations
- Goal is to construct next protected bike lane by the end of 2015

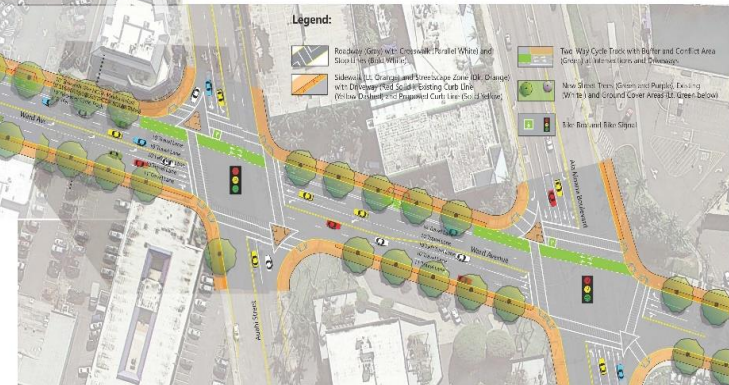
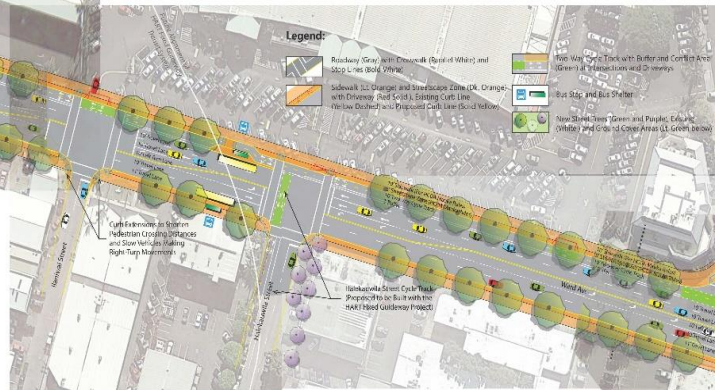
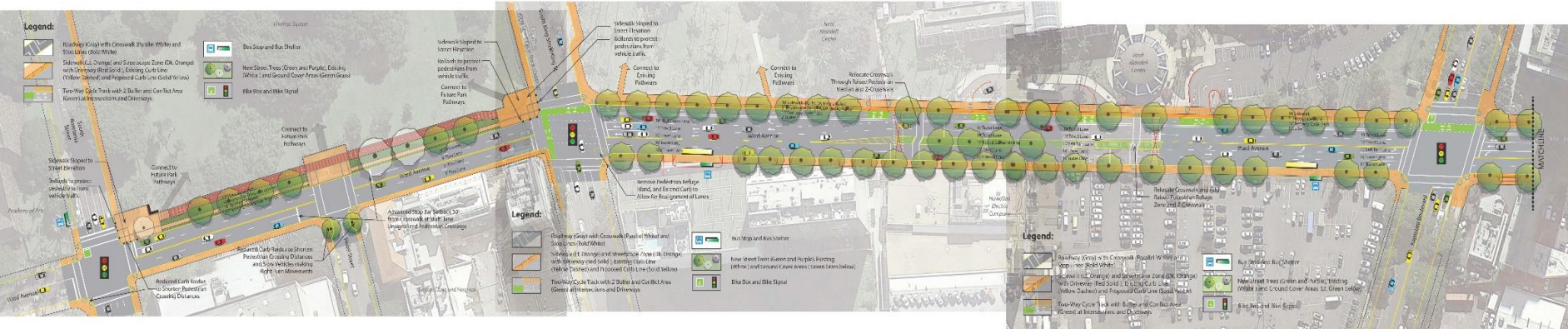


# SOUTH STREET TWO-WAY PROTECTED BIKE LANES PILOT PROJECT





# WARD AVENUE COMPLETE STREET CONCEPTUAL DESIGN

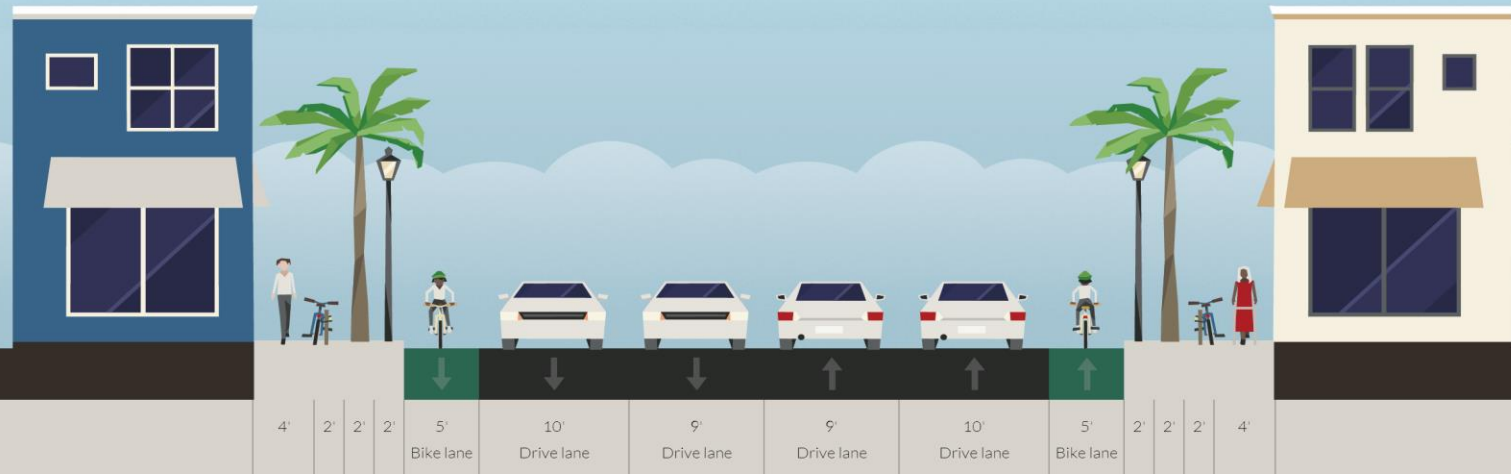




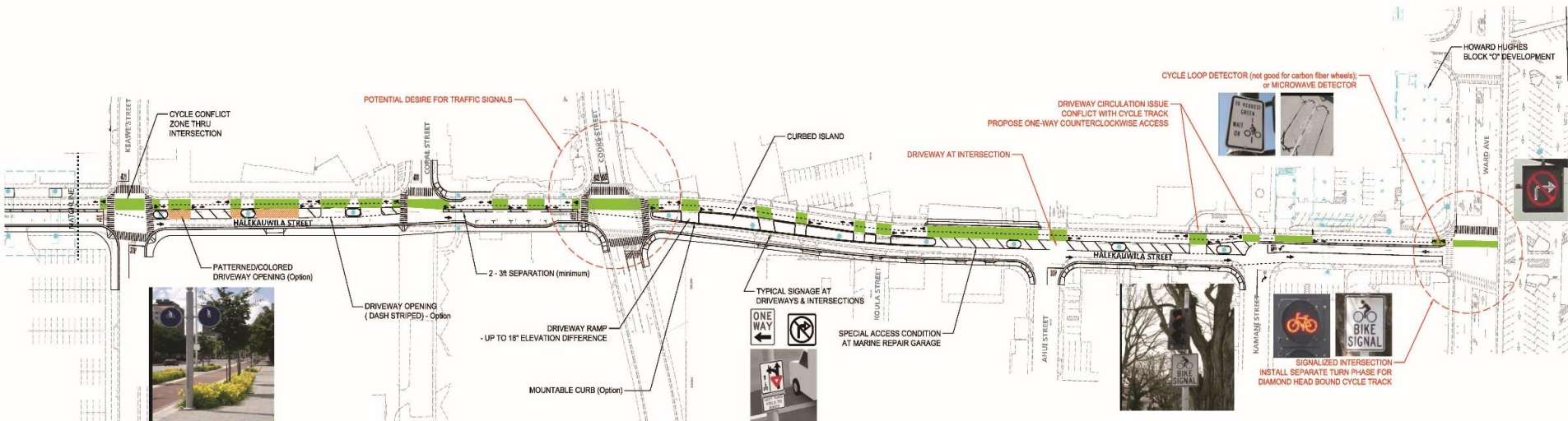
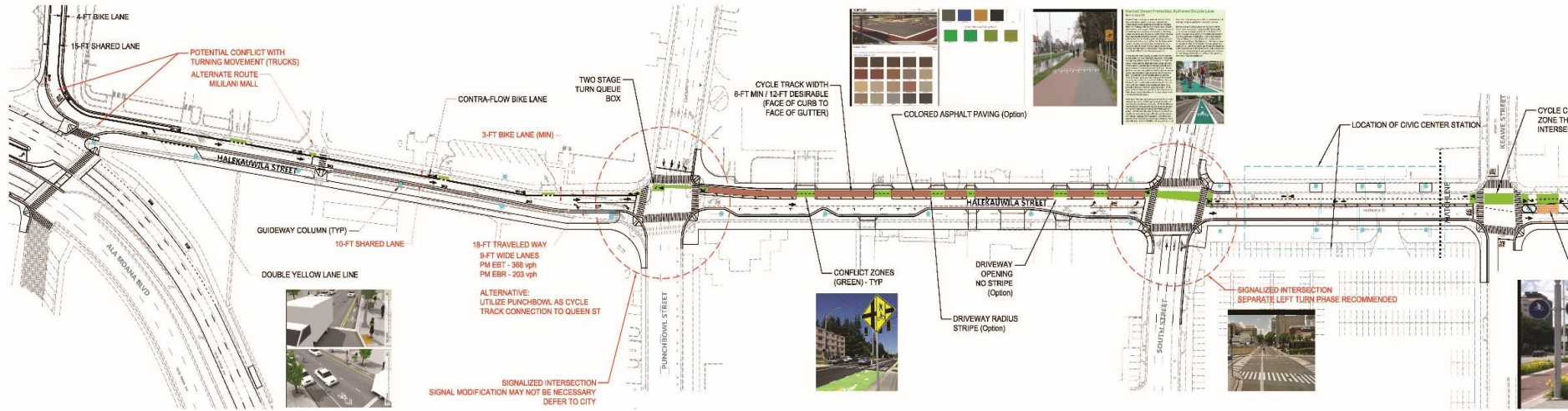
# McCully Street Bike Lanes

- Connection from Waikiki to the King Street protected bike lane and the UH-Manoa Area
- Limited ROW allows for conventional bike lanes

## McCully Street



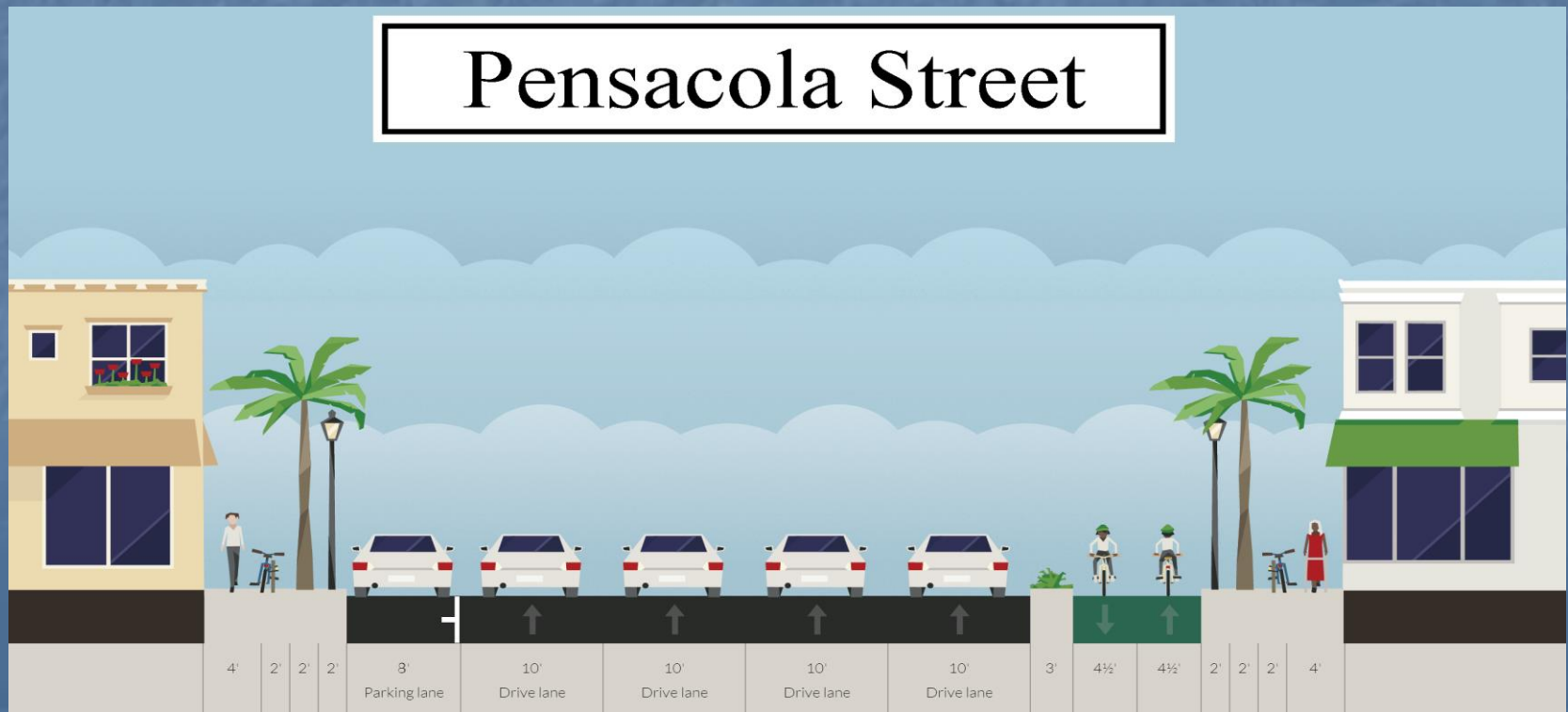
# HALEKAUWILA STREET PROTECTED BIKE LANES CONCEPTUAL DESIGN

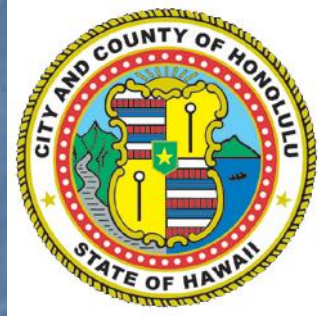




# Pensacola Street Bikeway

- Connection from the King Street bikeway to Ala Moana Blvd
- To be implemented with the Department of Design and Construction's resurfacing project
- Design treatment is yet to be determined





# Mahalo!



**Honolulu Bicycle Program**